

aware County. And the percentage of plants which may be expected to grow in this region and do not, and those which grow contrary to expectation, is wholly conjectural. During the week spent in the area, and through the kind coöperation of the members attending the meeting a collection of the flowering plants was secured which may be considered fairly representative of the flora at that time. Dr. Philip Dowell did much discriminating in the collection of hybrid ferns, and as the country about Stamford is particularly rich in these interesting plants, much valuable information on the subject will be preserved as a permanent record.

It is not possible at this time to publish the determinations of the plants collected during the week, but following out the notice printed in *TORREYA* for June, whatever of special interest may turn up in the collection will be commented upon later. There was a rather slender attendance at the symposium.

NORMAN TAYLOR

NEW YORK BOTANICAL GARDEN

## OUR CITY PARKS IN THE HUDSON-FULTON CELEBRATION

### THE BOTANICAL GARDEN, BRONX PARK \*

In coöperation with the Hudson-Fulton Celebration Commission, specimens of all the native trees of the Hudson River Valley growing in the grounds of the New York Botanical Garden will be marked temporarily with a large letter "H." Inasmuch as nearly all the wild trees of the valley are growing within the grounds, either wild there, or planted in the arboretum and along the driveways, this illustration of the trees which might have been seen by Hudson and his company in 1609 will be nearly complete. While the number of individuals of most kinds in the Hudson Valley has been greatly reduced by clearing land for cultivation and by lumbering operations, it is not likely that any species native to the valley has been exterminated within its bounds.

\* Reprinted by permission from the *Journal of the New York Botanical Garden* for August, 1909.

Another feature will be a Guide Book to the grounds, buildings and collections of the Garden to which will be appended a descriptive list of the native trees of the Hudson River Valley written by Mr. Norman Taylor, an assistant curator; this list will give a short popular account of each of the kinds of trees and a number of them will be illustrated by reproductions of photographs. This document will be issued as a Bulletin of the Garden and distributed to all members and to all institutions with which the Garden has exchange arrangements.

The question has been asked if any of the large trees of the Hudson River Valley were in existence in 1609. The most likely illustrations of this are the large white oaks (*Quercus alba*) which are found in many places, some of them approximating four feet in trunk diameter, or perhaps even larger. The slow growth of this tree after its first hundred years of life would make it probable that some of these monsters were at least saplings before the end of the sixteenth century. The average increase in diameter of the white oak as calculated from the thickness of annual wood rings of trees cut on Staten Island some years ago, is 0.18 inch up to the age of 47 years. Subsequently, the layer of wood annually laid on is much thinner. Observations on the largest white oak within the grounds of the Garden, growing in the woods south of the Museum Building along the path leading to the waterfall near a cluster of sweet birches show that its circumference, measured July 30, 1909, at four feet above the ground, is 11 feet and 2 inches; its diameter is, therefore, about  $42\frac{1}{2}$  inches and its radius  $24\frac{1}{4}$  inches; allowing for the thickness of the bark the radius of wood is about 20 inches. A little piece was taken out from the side of this tree with a sharp chisel and the wound made carefully covered with tar. The number of wood layers to the inch as revealed by this experiment is 16, the average thickness of the layers being thus 0.062 inch. From these observations and other data it is estimated that the average thickness of the annual wood layer of the white oak in trunks up to  $42\frac{1}{2}$  inches in diameter is approximately 0.09 inch, which would indicate that this individual tree is about 220 years old. It would, therefore, seem that white oaks with a wood-radius of from 25 to 27 inches would be 300 years old.

A third feature of the coöperation will be an illustrated lecture on the native trees of the Hudson River Valley to be delivered at the Museum Building of the Garden on the afternoon of Saturday, October 30, at four o'clock.

N. L. BRITTON

### BOROUGHES OF BROOKLYN AND QUEENS \*

Through the courtesy of Commissioner Michael J. Kennedy, the different species of trees have been labeled in Prospect Park, from the Plaza to the Willink Entrance; in Bedford Park; in Highland Park, and in Tompkins Park. An additional small enameled sign has been hung on those labeled trees that were indigenous to the Hudson River Valley in 1609. The special label reads: "This species is a native of the Hudson River Valley."

### TORREY BOTANICAL CLUB FIELD MEETINGS

The field committee will hold no meetings on September 25 or October 2, on account of the Hudson-Fulton Celebration.

*October 9.* — Special excursion for fungi. — Party will meet at museum building of the Botanical Garden at 2 p. m., where they will be met by the guide, Dr. W. A. Merrill.

*October 16, Fort Lee to Hackensack, N. J.* — Party will meet at the west 130th Street Ferry at 3 p. m. Return as desired. Guide, Miss Broadhurst. Cost of trip, 20 cents.

*October 23.* — Special excursion for fungi. Party will meet at the Jerome Avenue entrance to Woodlawn Cemetery at 2 p. m., where they will be met by the guide, Mr. F. J. Seaver. Cost of trip, about 20 cents.

*October 30, Wingdale, N. Y.* — Train leaves Lexington Avenue Station (N. Y. Central, Harlem Division), at 8:52 a. m. Returning train leaves at 4:36 p. m. Bring lunch. Cost of trip, \$3.25. Guide, Mr. Taylor.

\* Reprinted from the announcement prepared by the committee on science, history and art of the Hudson-Fulton celebration commission.